National Aeronautics and Space Administration

NASA's Launch Service Program Presents...

Origins Spectral Interpretation Resource Identification Security - Regolith Explorer (OSIRIS-REx)

Launch Vehicle
Atlas V-411

Launch Location
Cape Canaveral Air Force Station Florida

Launch Date
2016

The Origins Spectral Interpretation Resource Identification Security - Regolith Explorer spacecraft will travel to a near-Earth asteroid, called Bennu (formerly 1999 RQ36), and bring at least a 2.1-ounce sample back to Earth for study. The mission will help scientists investigate how planets formed and how life began, as well as improve our understanding of asteroids that could impact Earth.

OSIRIS-REx is scheduled for launch in late 2016. As planned, the spacecraft will reach its asteroid target in 2018 and return a sample to Earth in 2023.

NASA's Goddard Space Flight Center in Greenbelt, Maryland, provides overall mission management, systems engineering and safety and mission assurance for OSIRIS-REx. Dante Lauretta is the mission's principal investigator at the University of Arizona. Lockheed Martin Space Systems in Denver is building the spacecraft. OSIRIS-REx is the third mission in NASA's New Frontiers Program. NASA's Marshall Space Flight Center in Huntsville, Alabama, manages New Frontiers for the agency's Science Mission Directorate in Washington.

Mission Objectives Include:

- Returning and analyzing a sample
- Mapping the asteroid
- Documenting the sample site
- Measuring the orbit deviation caused by non-gravitational forces
- Comparing observations at the asteroid to ground-based observations

www.nasa.gov

SP-2016-02-053-KSC